urticaria in children with salines, intestinal antiseptics, etc., can seriously contend that they are in any extended sense successful remedies.

Our disposition is to accept as predisposing cause some condition of nerve insufficiency. What in turn causes that, we do not know. Whether it is a poor inheritance, whether it involves questions of internal secretion or complex problems of biochemistry, or something still more remote, is for us yet to seek.

For the present we consider as efficient causes of the chronic papular urticarias of children two factors, namely, first, a predisposing nerve unbalance—a condition of increased sensitiveness to sensorial irritation—and second, as exciting cause, the sensorial irritation itself.

In San Francisco all children for whom fleas have a liking are bitten. Those children in whom the efficient predisposing cause exists react with a papular urticaria.

Discussion.

Dr. E. C. Fleischner, San Francisco: One point of importance is the effect of gastro-intestinal disturbances in these cases. Dr. Porter will agree that we frequently see children in which the gastro-intestinal upset is responsible for the urticaria. This is especially true when the fat content and starch content of the food is too high. It is common in children in the second year when the child is kept on milk and gruels. If you put these children on skim milk and remove the starch in the diet giving vegetables, meat and a dose of calomel these particular children will get over these attacks of urticaria irrespective of flea bites. However, I do think that here in the West fleas play a large part in the etiology.

Dr. H. E. Alderson, San Francisco: The flea is becoming a very important member of the community, particularly since the recent plague troubles, and now the prominence given it in connection with urticaria makes it apparent that we should be more diligent than ever in looking for some means of getting rid of this parasite. All dermatologists agree that the commonest cause, if not the exciting cause, of urticaria is some form of gastro-intestinal indigestion. Every child that is bitten by fleas does not have urticaria, but a large percentage of urticaria cases which appear at the clinics are in children coming from other climes (the East usually), and children with gastro-intestinal troubles. I can confirm what Dr. Chipman has said with regard to the prevalence of lichen urticatus here. I know from my own experience that we see relatively more cases of lichen urticatus here than in Baltimore, Boston or New York. The occurrence of urticaria with asthma is a very interesting thing. The medical man has observed this more than the dermatologist, because the urticaria that develops with or after asthma is a transient affair. Concerning the pathology of the condition, I saw a great deal of work done by Gilchrist in Baltimore, in which he made biopsies or lesions of factitious urticaria, and the conditions observed were dilatation of the vessels with an outpouring of polymorphonuclears with rapid fragmentation of the nuclei, suggesting the presence of some circulating toxin. It has been my observation that urticaria occurs rather frequently in Honolulu in newcomers, and is usually due to the indigestion that develops shortly after arrival there as a result of eating all kinds of fruits and fish and it is often excited by the bite of a tiny ant which is prevalent there. This ant seems to perform the role which the flea plays here.

Dr. Langley Porter, San Francisco: There are two points that have been brought up, one in this paper and one in the discussion of Dr. Fleischner, and they do not seem to me to be in opposition. Dr. Chipman's contention is that the papular urticarias result from local irritations such as flea bites acting upon a skin sensitized by some toxin which unbalances the nervous system. We know rachitic children with intestinal symptoms have this nerve unbalance, which is evidenced by such manifestations as convulsions and laryngismus. The proof that Dr. Chipman's contention is correct is evidenced by the treatment. You cannot cure a papular urticaria simply by remedying the gastro-intestinal condition unless at the same time you get rid of the flea; but you can take children who have definite gastro-intestinal disturbances and put them into bed, protecting the bed from the invasion of fleas by the use of Keating's powder, and the urticaria will promptly clear up and will not return so long as these conditions are maintained in the sleeping quarters.

CLINICAL FEATURES OF ENDEMIC GRIPPE IN CHILDREN IN SAN FRANCISCO AND VICINITY.

By SANFORD BLUM, M. S. M. D., San Francisco.

Observations embracing the period from 1898 to the present time have shown that grippe, caused by the Pfeiffer influenza bacillus, is constantly present in San Francisco and the nearby cities. In a large number of acute respiratory affections, studied in private practice and in the Pediatric Clinic of the University of California, influenza bacilli have been identified as the causative agent. Owing to the prevalence of mixed infections and overgrowth by other microorganisms, the isolation of Pfeiffer's bacillus in culture, has been only occasionally successful. I have, however, secured some pure cultures. In smears prepared from sputum, nasal discharge and swabs from the throat, influenza bacilli have been readily identified. In the STATE JOURNAL, September, 1908, Dr. H. C. Moffitt has described the general clinical features of influenza as observed by him in this locality. I shall here indicate the characteristic peculiarities of this disease as it occurs in infancy and childhood in and about San Francisco.

Endemic grippe occurs most frequently in the winter and spring months; but it may appear at any season. Its development is favored by atmospheric variations; rapid changes from wet or foggy condition to hot, sunny weather, with attendant wind and dust, especially favor its development. Fresh cases occur regularly in the clear, sunny and dusty days which succeed each rainy spell during the mild San Francisco winter and early spring. No age is exempt, though cases in early infancy are rare, owing, I believe, to the greater protection from the elements exercised during this period and the comparative isolation from infected individuals. Cases during the first year of life are common, occurring consistently in families where the nurse or some other member of the household, afflicted with the malady, comes into close association with the infant. The majority of cases occur in the first five or six years of life.

The disease is exceedingly infectious, not infrequently attacking one member of a family after another, though all may be exposed at the same time.

Many escape infection. The incubation period is one to three days. Cases of this class present respiratory, febrile, nervous and gastroenteric symptoms; but the respiratory symptoms predominate to such a degree as to outclass the others and to relegate them to positions of merely secondary importance. I have occasionally seen older children who presented febrile or gastroenteric symptoms of grippe, without respiratory symptoms; however, these cases have been so infrequent that they may be regarded as exceptional. The cases occurring in infancy have invariably presented initial respiratory symptoms, to which later, often but not always, evidences of gastroenteric disturbances were added.

As a class, the local cases of influenza in infancy and childhood present the following definite train of symptoms. The onset is abrupt and is attended by fever, malaise, headache and pain, anorexia, and especially by coryza.

Fever: The temperature is moderately elevated. In an infant eight months of age the rectal temperature remained around 101° Fahrenheit throughout the first week; in a twenty-months-old baby the rectal temperature was 103° the first day and hovered between 99° and 102° throughout the first week. The fever is rarely high, except when complications such as otitis or mastoiditis are present—and it is then attributable to the complication. The skin at first is hot and dry; there are periods of profuse perspiration, accompanied by chilliness, caused by evaporation from the moist surface. The face is suffused, the eyes bright. Pulse and respiration are accelerated proportionately to the degree of fever. After the first "week" the temperature recedes to normal, though it may temporarily flare up with any new extension or exacerbation of the infective process.

Malaise: Headache and Pain: There is a mild degree of prostration. Older children complain of being tired or have headache and pains in the back and limbs. Infants refuse to nurse and are restless and uncomfortable or somnolent and may vomit. Headache may be aggravated by each paroxysm of coughing. Instead of pain in the limbs there may be simply a tired feeling. Prostration of a degree approaching that which accompanies grippe on the Atlantic coast does not occur or, at most, is exceptional.

Coryza and Respiratory Catarrh: The respiratory tract presents the cardinal symptoms. For two or three days preceding the onset of the malady there may be prodromal symptoms, evidenced by sneezing and slight nasal discharge. Pronounced rhinitis ensues; there is a copious watery discharge from the nose at times tinged with blood; the turbinates are swollen, often to such an extent as to occlude one or both nostrils. This mechanical hindrance to nasal respiration prevents infants from nursing and causes them to keep the mouth open and to breathe through the mouth. From the nose the infection extends along the lachrymal canals to the eyes, with resulting conjunctivities. By extension from the nose, or synchronously with its infection, pharyngitis occurs. The pharynx is red and swollen; the tonsils are enlarged and inflamed and may contain a few isolated, white plugs. The inflamed area extends forward over the anterior pillars of the fauces and about one-third of an inch on to the soft palate. At this stage of the disease there is lachrymation, nasal discharge and cough. Considerable discharge from the inflamed parts is expectorated by older children, swallowed by infants. The process may advance no further; in the mildest cases resolution occurs from this point and recovery within two or three days ensues. In another, the common class of cases, the infection continues to advance. It may successively involve the larynx and the bronchi, with resulting laryngitis and bronchitis; in many cases it attacks the bronchi without perceptibly affecting the larynx. With laryngitis occurs the characteristic barking, laryngeal cough, accompanied by pain in the larynx. The bronchitis presents relatively few symptoms, the most prominent being severe, spasmodic cough, a few squeaking rales on inspiration, and copious expectoration. The cough is worse in the morning when nummular sputum is expectorated. The sputum in typical cases, at this stage, is copious and has a golden yellow color.

The digestive tract may become involved through the infant swallowing infectious matter from the air passages. The resulting gastroenteric catarrh manifests itself by anorexia, vomiting and diarrhea. The stools are thin, greenish and slimy. Infants usually vomit at the beginning of the digestive disturbance.

Complications: The most frequent complication is otitis. Even in mild cases often there is partial deafness and earache, due to swelling and occlusion of the pharyngeal extremity of the eustachian tubes. If the infection extends along the eustachian canal to the middle ear, serious or purulent otitis media ensues. This is the commonest complication. Mastoid involvement occurs occasionally. Pneumonia is, in this vicinity, an infrequent complication. The heart and kidneys are ordinarily not affected.

Course: Abortive Form: Recovery takes place after two or three days of mild rhinitis or nasopharyngeal catarrh in a few cases. These constitute an abortive type of the disease. The average duration of the disease is about ten days; it may last only a week or it may extend over three weeks, without presenting any unusual phenomena. Probably climatic conditions exercise the greatest influence on the duration of the illness; cool, equable weather favors recovery; sultry, dry, or changeable weather retards it. Recovery from the attack may forthwith be complete; in a large proportion of cases, however, there is protracted convalescence, due to persistence of bronchitis and nasopharyngitis. Pain and fever disappear with the subsidence of the active infection; but coughing, expectoration and nasal discharge may persist as long as the bronchitis and nasopharyngitis. Rarely a severe type occurs which, accompanied by high fever, great prostration and severe neuralgic pains, resembles epidemic influenza. Apart from the abortive attacks mentioned above, endemic grippe always leaves the child more depressed than ordinary catarrhal infections.

The diagnosis is made from the clinical symptoms described above, together with the discovery of influenza bacilli in the discharge from the infected parts. The bacilli are present in the sputum and nasal and conjunctival discharges; and may be obtained on swabs from the pharynx, tonsil, etc. They are delicate, short rods, two or three times as long as they are broad, with rounded ends, nonmotile and noncapsulated. They occur in pairs, chains, or clusters. Owing to their diminutive size, when occuring in pairs, they resemble diplococci. They lie chiefly between the cells, in the mucoid basement substance. They stain readily; a particularly satisfactory preparation is secured by staining about twelve minutes with fresh carbol-fuschin solution, with or without heating. Influenza bacilli decolorize by the Gramm method. Cultures may be obtained by spreading the infected material upon fresh blood, superposed upon slant agar. Human or pigeon blood is suitable for this purpose. In culture the colonies appear as minute, transparent, dewlike droplets. The colonies appear within twenty-four hours.

Differential Diagnosis: Endemic grippe may be differentiated from ordinary catarrhal bronchitis by (1) the history of exposure to grippe; (2) the more violent onset of grippe, with its attendant pronounced systemic disturbances; (3) the disproportion of the symptoms in grippe to physical signs of bronchial involvement; (4) the greater obstinacy of grippe; (5) the implication of other mucous surfaces, nasal, conjunctival, etc., in grippe; (6) the identification of influenza bacilli in grippe. From the early stage of measles grippe may be differentiated by (1) the history of exposure to cases of grippe or measles, or the prevalence of either of these diseases; (2) the different appearance of the pharyngeal and oral mucus membrane. In grippe there is diffuse redness of the tonsils and pharynx; in measles there is an eruption of discrete spots on the soft palate and buccal mucous membrane; (3) the eruption of the measles rash on the fourth day; (4) the identification of influenza bacilli. The differentiation of grippe from pertussis is at times exceedingly difficult. It depends upon (1) the history of exposure; existence of one or the other malady in the house or locality; (2) mode of onset. Marked fever, malaise, neuralgic pains speak for grippe and against pertussis. Prolonged continuation of paroxysmal cough without fever inclines to the diagnosis of whooping cough as opposed to grippe. The crowing inspiration characteristic of whooping cough is usually, but not always, absent in grippe. Grippe and whooping cough may co-exist. The differentiation of grippe from typhoid is ordinarily simple, the only point in which local endemic grippe resembles typhoid being in the prominence of fever in both. But the fever in grippe is essentially irregular, reaches its maximum within the first three or four days, and quickly subsides; while in typhoid the fever ascends regularly, takes longer to reach its maximum and descends deliberately. While the recognition of influenza bacilli in the mucous discharges, taken alone, does not warrant the diagnosis of grippe, their identification in the mucoid discharges of patients presenting grippe's clinical symptoms establishes it. On the other hand, a positive Widal reaction confirms the diagnosis of typhoid, although a negative reaction does not exclude it.

Prognosis: The individual attack of endemic grippe encountered in San Francisco terminates in recovery. But the child may harbor the germs for years and suffer repeated recurrences. In April, 1904, a I saw a three-year-old girl who was suffering with grippe; there have been recurrences each winter since then and the child at this time has an acute attack.

Treatment: There is no known specific. In the initial stage, if pharyngitis alone is present, sometimes a cure may be effected by swabbing with two to five per cent solution of silver nitrate. The patient should remain in bed as long as fever is present. Diet should be nourishing but not irritating; in infants it should be considerably reduced during the febrile stage. The bowels should be evacuated by a brisk purge in the beginning of the attack and should subsequently be kept free. For the headache and neuralgic pains the coal tar preparations are efficient remedies. For the nasopharyngitis spraying with mild, antiseptic alkaline solutions excels other modes of medication; an important function it performs is prevention of otitis by keeping the pharyngeal eustachian orifices clear. In many cases the iodides appear to act favorably in the early stages of grippal laryngitis and bronchitis. Later belladonna acts well in drying the secretions. Salol is valuable, especially when there is gastroenteric involvement.

Grippe as it occurs in San Francisco is identical with grippe of the Atlantic Coast and Europe in its etiology and pathology. There is, however, remarkable difference in the clinical manifestations; grippe in this vicinity presenting so comparatively little systemic disturbance that even at this time its endemic occurrence is not generally recognized nor its significance adequately appreciated.

OFFICERS OF THE UROLOGICAL ASSOCIATION.

At the meeting of the Pacific Coast Branch of the American Urological Association, on April 19, 1910, at Sacramento, California, the following members were elected to their respective offices: G. Sherman Peterkin, Seattle, president; R. L. Rigdon, San Francisco, vice-president; Louis Gross, San Francisco, secretary.

NEW AND NON-OFFICIAL REMEDIES.

Since March 1, the following articles have been accepted by the Council for New and Non-Official Remedies:

Carbosant (Heyden Chemical Works); Mammary Substance (Armour & Co.); Ovarian Substance, desiccated (Armour & Co.); Parotid Glands, desiccated (Armour & Co.); Spleen, desiccated (Armour & Co.); Thymus, desiccated (Armour & Co.).